

# High Tunstall College of Science Curriculum Intent

Subject: Biology Year: 9

## Thread 1—Cells and organisation



	Biology Thread 1	Progress		
Topic	Key ideas	R	A	G
Cells and organisation	I can compare prokaryotes and eukaryotes			
	I can compare animal and plant cells, giving the function of cell organelles			
	I can explain cell differentiation and how cells are specialised for their function			
	I can explain how living things are organised in terms of cells, tissues, organs and organ systems			
	I can describe the structure and function of the digestive system			
	I can describe the structure and function of the heart			
	I can describe the structure and function of the respiratory system			

Lesson	Learning Focus	Assessment	Key Words
1	What are prokaryotes and eukaryotes?	Completion of differentiated tasks comparing prokaryotes and eukaryotes	Prokaryote, eukaryote, nucleus, organelle
2	How are plant and animal cells different?	SOLO taxonomy tasks	Cell, nucleus, cell membrane, cytoplasm, cell wall, chloroplasts, vacuole
3	What is cell differentiation and specialisation?	Completion of differentiated tasks exploring specialised cells	Specialisation, sperm, ovum, muscle, neurone, palisade, root hair, red blood cell
4	How are organisms organised?	Completion of application tasks looking at specific organ systems and their organisation	Cell, tissue, organ, organ system, organism
5	How do we digest food?	Plenary activity with different challenge tasks to demonstrate knowledge and understanding	Digestion, mouth, oesophagus, stomach, small intestine, large intestine, rectum, anus
6	What is the role of the heart?	Extended writing—the journey of the blood	Heart, ventricles, atria, aorta, vena cava, pulmonary artery, pulmonary vein
7	What is the role of the respiratory system?	Summary task looking at the role of the respiratory system	Lungs, alveoli, diffusion, bronchi, bronchioles